LISTED MAY 13th, 1955 3,000,000 shares of \$1.00 par value Ticker abbreviation NAM Dial ticker number 148 Post section 3.5

# TORONTO STOCK EXCHANGE

# LISTING STATEMENT

# NAMA CREEK MINES LIMITED

(No Personal Liability)

Incorporated by Letters Patent dated the 28th day of January, 1954. Issued pursuant to The Ontario Companies Act, now R.S.O. 1950, Chapter 59 and Part XI thereof.

1. Address of the Company's Head Office and of any other offices:

Suite 908, 330 Bay Street, Toronto 1, Ontario.

2. Officers of the Company:

Vice-President

OFFICE HELD NAME M. James Boylen, D.C.L. President

Frederick B. Gee Secretary Treasurer

Frederick W. Boulger

35 Kingsway Crescent, Toronto, Ont. David W. Gordon, F.C.I.S. 15 Indian Grove, Toronto, Ont. 28 Doris Street, Willowdale, Ont.

90 Kennedy Avenue, Toronto, Ont.

OCCUPATION

Prospector Executive Secretary Mining Accountant

Mining Accountant

3. Directors of the Company:

NAME

M. James Boylen David W. Gordon Frederick W. Boulger Frederick B. Gee Donald A. Keith

ADDRESS

35 Kingsway Crescent, Toronto, Ont. 15 Indian Grove, Toronto, Ont. 90 Kennedy Avenue, Toronto, Ont. 28 Doris Street, Willowdale, Ont. 86 South Drive, Toronto, Ont.

OCCUPATION Prospector

Executive Secretary Mining Accountant Mining Accountant Queen's Counsel

4. Names and addresses of all transfer agents:

The Guaranty Trust Company of Canada, 70 Richmond Street West, Toronto, Ontario.

5. Particulars of any fee charged upon transfer other than customary government taxes:

A charge of 25 cents may be made for the issuance of each stock certificate issued by reason of a transfer or transmission of shares in the Capital Stock of the Company or otherwise.

6. Names and addresses of all registrars:

The Guaranty Trust Company of Canada, 70 Richmond Street West, Toronto, Ontario.

7. Amount of authorized capital: \$3,000,000.00.

8. Number of shares and par value: 3,000,000 shares of the par value of \$1.00 each.

9. Full details of all shares issued in payment for properties or for any other assets other than cash:

Number of shares Date February 5, 1954.... 750,000

Shares allotted and issued in payment and satisfaction for the purchase of Thirteen (13)
Unpatented Mining Claims situated in the Manitouwadge Lake Area, District of
Thunder Bay, Port Arthur Mining Division, Ontario, which said claims may be
more particularly described as follows, namely Claims Nos. T.B.-47462 to
T.B.-47474 inclusive. All of the above claims are duly recorded in the name of
Nama Creek Mines Limited (No Personal Liability) and held under Miner's
License No. A-26471 issued by the Department of Mines, Province of Ontario,
Toronto. Description

February 14, 1955... 225,000 Shares allotted and issued in payment and satisfaction for the purchase of Thirty (30)

Unpatented Mining Claims situated in the Counties of Gloucester and Northumberland, South Bathurst Area, Province of New Brunswick, which said claims may be more particularly described as follows: License No. 1713—Claims Nos. 1 to 10;

License No. 1714—Claims Nos. 1 to 10 and License No. 1715—Claims Nos. 1 to 10.

All of the above claims have been duly recorded in the name of Nama Creek Mines Limited (No Personal Liability) and held under Mining License issued by the Department of Mines, Province of New Brunswick.

975,000 Total.....

This listing statement is a copy of the listing application made by the applicant company. The Exchange has received no consideration in connection with the issue of this listing statement other than the customary listing fee. The papers and exhibits submitted by the applicant company in support of the listing application are open for inspection at the general office of the Exchange.

_							
10.	Full details of all shares sold for cash.	Date         Number of Shares         Price per Share         Amount realized by Company           January 28, 1954         5         \$1.00         \$5.00           February 18, 1954         503,050         .75         377,287.50           March 9, 1954         96,950         .75         72,712.50           Total         600,005         \$450,005.00					
11.	Total number of shares issued.	1,575,005.					
12.	Number of shares now in treasury or otherwise unissued.	1,424,995.					
13.	Particulars of any issued shares held in trust for the Company or donated for treasury purposes.	Not Applicable.					
14.	Date of last annual meeting.	None held as yet—company only recently incorporated.					
15.	Date of last report to share-holders.	Engineer's Exploration Report dated December 30th, 1954.					
16.	Details of any treasury shares (or shares issued subject to payment or shares held for the benefit of the treasury) now under option or the subject of any underwriting or sales agreement. If none, this to be stated.	There are no shares under option nor is there any Underwriting or Sales Agreements outstanding against any of the Treasury Shares of the Company.					
17.	Details of any shares pooled, deposited in escrow, non-transferable or held under any syndicate agreement or control.	Certificates representing 877,500 shares of the capital stock of the Company being part of the stock issued in payment of properties, are deposited in escrow with the Guaranty Trust Company of Canada, Bay and Richmond Streets Branch, Toronto, Ontario, subject to release only on the written consent of the Ontario Securities Commission and the Board of Directors of the Company and subject further to transfer, hypothecation, assignment or other alienation only on the written consent of the Ontario Securities Commission.					
18.	Details of any registration with or approval or authority for sale granted by or any filing with a Securities Commission or corresponding Government body.	Letter received from the Ontario Securities Commission, dated September 3rd, 1954, in which they acknowledge the receipt of the material required under The Securities Act (Ontario) in order to offer its shares to the public in Ontario through the medium of registered security dealers; date of acceptance February 18th, 1954.					
19.	Has any application for registration with or approval or authority for sale by or any filing with a Securities Commission or corresponding Government body ever been refused, cancelled or revoked? If so, give particulars.	Not Applicable.					
20.	Particulars of any bonds, debentures, notes, mortgages, charges, liens or hypothecations outstanding.	There are no bonds, debentures, notes, mortgages, charges, liens or hypothecations outstanding.					

- 21. Enumerate fully, giving claim or property numbers, approximate acreage, townships and mining camp or oil field:
  - Properties owned where titles vested in Company.
  - (b) Properties leased.
  - (c) Properties otherwise held.

Give particulars of title held by the Company in each instance (e.g. patented, un-patented, Crown granted, held under mining license, perpetual lease, etc.)

- (1) Thirteen (13) Unpatented Mining Claims numbered T.B.-47462 to T.B.-47474 inclusive, situated in the Manitouwadge Lake Area, District of Thunder Bay, Port Arthur Mining Division, Port Arthur, Ontario, containing an area of approximately 670 acres more or less. The property is situated roughly midway, or 25 to 30 miles either way, from the main line of the C.N.R. and C.P.R. railways. All weather roads from the main highways to the south and north are now being built, or in the planning stages by the Provincial Government. Rail service to the district is now under way and the C.N.R. are in the process of constructing a spur line from Hillsport to the Geco Mine Area. On completion this line should pass within 2 miles of the indicated ore body on the Nama Creek Property. The property is bounded on the east by Glenburk Mines, on the north and northwest by Lun-Echo, on the south by Delmico and on the east by Willroy Mines. Most of the diamond drilling on the Geco, Willroy, Nama Creek and Lun Echo properties is on a more or less common strike.
  (2) Seventy-three (73) Unpatented Mining Claims situated in the Parish of Bathurst, County of Gloucester, Province of New Brunswick, being Claim Numbers as follows: License No. 1408—Claims 15-20, inclusive; License No. 1412—Claims Nos. 11 to 14, inclusive; License No. 1415—Claims 13, 14, 19 and 20; License No. 1425—Claims 1 to 3, inclusive; License No. 1446—Claims Nos. 5 to 10, inclusive; License No. 1447—Claims 1 to 10, inclusive; License No. 1544—Claims Nos. 1 to 10, inclusive; License No. 1544—Claims Nos. 1 to 10, inclusive; License No. 1545—Claims 1 to 10, inclusive; and License No. 1548—Claims Nos. 1 to 10 inclusive; Corporation Limited.
  (3) Thirty (30) Unpatented Mining Claims situated in Gloucester and Northumberland Counties, South Bathurst Area, Province of New Brunswick, being Claim Numbers as follows: License No. 1713—Claims 1 to 10, inclusive; License No. 1714—Claims Nos. 1 to 10 inclusive, containing an area of approximately 1,200 acres
- Limited.

All of the above claims in the Province of New Brunswick have been duly recorded in the name of the Company.

22. Full particulars of any royalties or other charges payable upon production from each individual property.

Not Applicable.

23. Are any lawsuits pending against the Company or any of its properties, or are there any other circumstances which might affect the Company's position or title adversely? If so, explain fully.

Not Applicable.

- 24. Describe plant and equipment on property.
- At the present time the Company has only erected a temporary set of mining camp buildings on its property which are satisfactory for the carrying out of the exploration and development of the Company's claims. As work progresses, it is the intention of the Company to erect more permanent camp buildings.
- 25. Describe development accomplished and planned.
- Manitouwadge Property—An electromagnetic survey has been carried out on the property with readings taken at 100-foot intervals on lines 200 feet apart. A total of eight important looking anomalies and several minor ones were disclosed. A program of trenching has also been carried out to test additional conductors and surface exposures. During the period from April to November, 1954, a total of forty diamond drill holes have been put down on the property for footage of 16,000 feet. The main sulphide zone is believed to lie on the westward extension of the Geco ore bearing structure. This zone was drilled for a lateral extent of 2,500 feet and a vertical depth of 700 feet. The best section of the main zone contains an estimated 321,095 tons of copper-zinc ore with an average grade of 1.05% copper, 3.44% zinc and 0.91 ounces silver per ton.

  Bathurst Area, Province of New Brunswick—During the period 1953-1954 an electromagnetic survey was carried out on the property containing 73 claims, and this was followed up by a diamond drill program in which thirteen holes were drilled for a total footage of 6,275 feet. The drill holes intersected shear zones and zones of graphitic schist, with variable amounts of pyrite and pyrrhotite mineralization. Results suggest that a fault zone, trending roughly east-west across the property offsets the favourable horizon between the two Brunswick ore bodies.

- An electromagnetic survey has been carried out on the group of thirty claims, situated approximately four miles east of the American Metals property on which five major orebodies have been found, and about six miles southwest of the Austin-Brook orebody of the Brunswick Mining and Smelting Corporations Limited property. The company is now awaiting results of exploration work now under way on neighbouring properties before carrying out additional work on this group of
- 26. Date and author of mining engineer's or petroleum geologist's report filed with this application and available for inspection on request.
- Engineer's Report dated April 30th, 1955, compiled by J. T. Flanagan, M.A., Sc., P. Eng.

27. Full particulars of production to date.

Not Applicable.

28. Have any dividends been paid? If so, give date, per share rate, and amount paid in dollars on each distribution.

Not Applicable.

29. Name and address of the solicitor or attorney whose certificate that the applicant is a valid and subsisting company and that the shares which have been allotted and issued were legally created and are fully paid and non-assessable has been filed with the Exchange.

Bell, Keith, Ganong & Griffiths, 25 Adelaide Street West, Toronto 1, Ontario.

30. (a) Have any shares of the Company ever been listed on any other stock exchange? If so, give particulars.

No.

(b) Is any application for listing the shares of the Company on any other stock exchange now pending or contemplated? If so, give particulars.

Shares of this Company may also be listed on the Canadian Stock Exchange, Montreal, Quebec.

- (c) Has the listing of any shares of the Company ever been refused or deferred on any stock exchange? If so, give particulars.
- 31. Particulars of the principal business in which each director has been engaged during the past five years, giving the length of time, position held and name of employing company or firm.

Matthew James Boylen, Toronto, Ontario, as a Prospector for the past twenty-five years. He is also a Director of this and various other mining companies, including Anacon Lead Mines Limited, Brunswick Mining & Smelting Corporation Limited, Chibougamau Explorers Ltd., Keymet Mines Limited, and New Larder "U" Island Mines Limited. He is also a Director of the Guaranty Trust Company of Canada.

DAVID WILFRED GORDON, Toronto, Ontario, as an Executive Secretary and Accountant, employed by Matthew James Boylen for the past ten years. He is also Secretary-Treasurer and Director of numerous other mining companies, including Anacon Lead Mines Limited, New Harricana Mines Limited, New Highridge Mining Company Limited, New Larder "U" Island Mines Limited, and Nudulama Mines Limited.

Frederick W. Boulger, Toronto, Ontario, employed by the said

Frederick W. Boulger, Toronto, Ontario, employed by the said Matthew James Boylen for the past six years, and prior to that by Lake Wasa Mining Corporation Limited. He is also Assistant-Secretary and Director of numerous other mining companies, including Anacon Lead Mines Limited, New Harricana Mines Limited, New Highridge Mining Company Limited, New Lardes "U" Island Mines Limited, Grandines Mines Limited, and Keyboycon Mines Limited.

Frederick B. Gee, Willowdale, Ontario, has been employed by Matthew James Boylen for the past two years, and prior to that was self-employed for a period of ten years, doing mine

Matthew James Boylen for the past two years, and prior to that was self-employed for a period of ten years, doing mine office secretarial and accounting work for various mining companies. He is also Secretary-Treasurer and Director of numerous other mining companies.

Donald A. Keith, Q.C., Toronto, Ontario, partner in the legal firm of Messrs. Bell, Keith, Ganong & Griffiths since January 1st, 1955, and for one year prior thereto, partner in the legal firm of Meesrs McMurtry, Ganong & Keith, and for three years prior thereto, partner in the firm of Messrs. Slaght, McMurtry, Ganong, Keith & Slaght. In addition, Mr. Keith is a Director of Anacon Lead Mines Limited, as well as other mining com-

panies.

Dated at Toronto, Ontario, the 30th day of April, 1955.



NAMA CREEK MINES LIMITED

"M. J. BOYLEN," President.

"D. W. GORDON," Vice-President.

## STATEMENT SHOWING NUMBER OF SHAREHOLDERS

Numbe	er					Shares
8	Holders	of	1 - 100	shares	5	305
68	4.4	6.6	101 - 1000	6.6	******************************	41,800
15	"	6.6	1001 - 2000	4.4	************************	29,500
17	6.6	4.6	2001 - 3000	6.6	*************************	46,100
6		6.6	3001 - 4000	6.6	***************************************	24,000
10	4.6	"	4001 - 5000	4.6		49,200
19	4.4	4.6	5001 – up	**		1,159,100
143	Stockho	lde	rs		Total Shares	1,350,005

# FINANCIAL STATEMENTS

BALANCE SHEET AS OF DECEMBER 31st, 1954.

#### ASSETS

Current: Cash in bankAccrued interest availableAccounts receivable			********	1,611.00	<b>4</b> 05 505 00	
INVESTMENT:	01 maturing	Santambar 21th	1055		\$ 85,705.90	
Guaranteed investment certificate, 3% maturing September 24th, 1955						
Camp and prospecting equipment, a Mining claims, at cost—	\$ 1,538.51					
In the Province of Ontario: 13 unpatented mining claims in the Manitouwadge  Lake Area, District of Thunder Bay, Port Arthur Mining Division  In the Province of New Brunswick: 73 mining claims in the Parish of Bathurst,						
County of Gloucester					400 200 54	
DEFERRED EXPENDITURES:	. •		. 9100		109,288.51	
Mine development and administration January 28th, 1954, to December Incorporation expense	er 31st, 1954.		************************	\$ 90,796.28		
1					93,181.28	
					\$488,175.69	
	LIAI	BILITIES				
Current: Accounts payable and accrued liabilities.						
	SHAREHOL	DERS' EQUIT	Y			
Capital Stock: Authorized—3,000,000 shares of \$1.0	00 par value.			\$3,000,000.00		
Issued—For cashFor mining claims		Par Value \$ 600,005.00 750,000.00	Discount \$150,000.00 712,500.00	Net \$450,005.00 37,500.00		
	1,350,005	\$1,350,005.00	\$862,500.00	\$487,505.00	487,505.00	
NOTE: The Company has accepted an offer of Kerto sell to it 30 mining claims in the Paris and Northumberland, Province of New B of Ken-Bay Gold Mines Limited on Februshares of the Company's capital stock.	hes of Bathurst runswick. The	and Northesk, Coun	ties of Gloucester the shareholders	.01		

\$488,175.69

Approved on behalf of the Board of Directors:

"M. J. BOYLEN", Director.

"D. A. KEITH", Director.

Submitted with our Report to the Shareholders dated May 13th, 1955.

SNYDER, CRAIG & CO.,
Chartered Accountants.

## STATEMENT OF MINE DEVELOPMENT AND ADMINISTRATIVE EXPENSES From date of Incorporation, January 28th, 1954 to December 31st, 1954

#### MINE DEVELOPMENT EXPENSES:

WINE DEVELOPMENT CAPENSES.	
Assaying	\$ 971.98
Camp maintenance	1,830.91
Consulting and engineering fees and expenses	5,240.71
Cookery	1,586.96
Core boxes	474.30
Geophysical surveys	7,630.00
Line cutting	250.00
Maps and blueprints	45.05
Mining licenses and fees	133.80
Surface diamond drilling	63,100.29
Surface exploration	2,390.66
Temporary camp structures	306.74
Travelling and transportation.	3,409.78
Unemployment insurance	52.47
Vacation pay	49.68
Workmen's compensation.	422.31
	\$87,895.64
Advertising Audit fees Bank charges Filing fees General expense Head Office administration Office stationery and supplies	\$ 397.00 735.00 7.63 42.00 12.69 1,500.00 432.49
Postage	14.10
Security registration	714.64
Telephone and telegraph	408.26
Transfer agents' and registrars' fees.	250.00
Transfer agente and regionary recommendation	250.00
Less: Cash discounts \$ 2.17 Interest earned 1,611.00	\$ 4,513.81
	1,613.17
	\$ 2,900.64
TOTAL MINE DEVELOPMENT AND ADMINISTRATIVE EXPENSES.	\$90,796.28

To the Shareholders,
NAMA CREEK MINES LIMITED (No Personal Liability),
Toronto, Ontario.

We have examined the accounts of Nama Creek Mines Limited (No Personal Liability) for the period from incorporation, January 28th, 1954, to December 31st, 1954, and report that we have obtained all the information and explanations we have required.

The attached Balance Sheet and Statement of Mine Development and Administrative Expenses are, in our opinion, properly drawn up so as to exhibit a true and correct view of the state of the affairs of the Company as at December 31st, 1954, and the results of its operations for the year ended on that date, according to the best of our information and the explanations given to us, and as shown by the books of the Company.

SNYDER CRAIG & CO.,

May 13th, 1955.

Chartered Accountants.

### ENGINEER'S REPORTS

## REPORT ON EXPLORATION—FEBRUARY, 1954 TO NOVEMBER, 1954

The following is a report of exploration carried out on the Nama Creek Mines Limited property from February, 1954, to November, 1954. Summary

- 1. The property consists of 13 claims in the Manitouwadge area of the Thunder Bay District of northwestern Ontario.
- The electromagnetic survey outlined a strong conducting zone and seven other important anomalies. These anomalies were found to be the result of sulphide mineralization.
- 3. The best section of the main sulphide zone contains 321,095 tons of ore grading 1.05% copper, 3.44%zince and 0.91 oz. silver per ton.

Location

The property consists of 13 claims and is located two miles northwest of the shaft site of Geco Mines Limited in the Manitouwadge area of the Thunder Bay district in northwestern Ontario.

The claims are number TB-47462 to TB-47474 inclusive.

Access

The property is connected by tractor road to Geco Mines Limited. A tractor road connects the property to Gaug Lake which is used for floatplane landing.

Light aircraft and helicopters are also capable of landing on Sally Lake on the northwest corner of the

property. History

There is no record or any evidence of previous exploration work having been carried out on the property. The claims were staked for the first time following the discovery of the Geco ore body in 1953.

Topography and Drainage

The property is situated on the height of land between the drainage systems of the Pic and Black Rivers. Three small streams running northeast and west join together to drain the property northward into Nama Creek and eventually into the Pic River.

Geophysics

An electromagnetic survey was carried out on the property with readings taken at one hundred foot intervals on lines two hundred feet apart.

A total of eight important looking anomalies and several minor ones were disclosed.

A programme of trenching was carried out to investigate the electromagnetic anomalies. A total of eleven trenches were dug across nine anomalies. It was disclosed that the electrical anomalies were the result of sulphide mineralization.

Diamond Drilling

The property was prospected by a total of forty diamond drill holes during the period April to November, 1954. Sixteen thousand feet of diamond drilling were completed in the investigation of six electromagnetic anomalies.

Geology

The property is underlain by bands of mafic and felsic gneisses trending northwest and dipping northeast at approximately 45°.

Prossing the northeast corner of the property is a band of granite, apparently the western extension of the

granite north of the Geco ore body.

Running through the property from the southeast and curving to the northwest is a broad band of mafic gneisses consisting of biotite, biotite-garnet-amphibole and amphibole gneisses. This band of gneisses is the host rock for the main mineralized zone on the property. The southern portion of the property is underlain with iron formation interbanded with felsic gneisses.

The sulphide mineralization on this part of the property is in the iron formation and associated gneisses.

To the west of the band of mafic gneisses, in what appears to be a cross fault, is a diabase dike running north-south.

Throughout the entire property there is considerable pegmatitic injection.

Mineralized Zones

The main sulphide zone is believed to be the westward extension of the Geco ore bearing structure.

The sulphides were encountered in a broad band of mafic gneisses which cross the property from southeast to northwest. Here sulphides of iron, copper and zinc were found as replacements in biotite serecite gneisses and pegmatite. This zone was drilled for a lateral extent of 2,500 feet and a vertical depth of 700 feet. Widths of sulphides

varied between nine and twenty feet in a zone dipping northeast at 45°

The best section of this zone contains an estimated 321,095 tons of copper-zinc ore with an average grade of 1.05% copper, 3.44% zinc and 0.91 oz. silver per ton.

The rest of the main sulphide zone was found to be below ore grade.

Six other anomalies tested by drilling were found to contain sulphides, predominantly pyrrhotite with lesser variable amounts of pyrite. Low copper values were found in all the sulphide zones.

Conclusions and Recommendations

From exploration work done to date on the property, the results indicate a main zone running diagonally through the property which suggests that somewhere, probably at depth, along its extensive length, bodies of commercial ore may be found. Many sections of core returned marginal ore, although the amount and grade of ore outlined to date are not sufficient to constitute a mineable ore body.

Much sulphide is found in the southern end of the property, which on surface has been delimited. However, as the regional strike runs diagonally through the property and dips northeast over 45°, it is quite conceivable ore bodies will be found at depth which could make large tonnages within the boundary lines of the property.

Willroy Mines Limited, on the east, has encountered promising results from recent drilling comparatively close to the common boundary line. It is indicated by reliable sources that the Willroy find could strike into Nama Creek ground and possibly through deep drilling, such extensions could become important. Willroy have three drills working on the western end of their property which will be watched closely for results which would justify additional drilling on the Nama Creek property.

J. McADAM, B.Sc.

J. T. FLANAGAN, P. Eng.

I have reviewed the report of Mr. J. McAdam and Mr. J. T. Flanagan, covering exploration on the Nama Creek Mines Limited property for the period February, 1954 to November, 1954.

Taking into consideration the various major ore bodies already found in the immediate vicinity, and the values found in the Nama Creek drilling, I would recommend further depth exploration on Nama Creek. To effect this exploration, I would recommend that a shaft be sunk to an initial depth of 700 feet with lateral development at 500 feet and 650 feet.

W. T. HORTON, P. Eng.

#### SUPPLEMENTARY REPORT

The following report describes the properties of Nama Creek Mines Limited.

Introduction

Nama Creek Mines Limited was formed in early 1954 to develop a group of claims in the Manitouwadge area. Since that time the Company has acquired two properties in the Province of New Brunswick.

Manitouwadge Area, Province of Ontario

Location.—The property consists of 13 claims and is situated two miles northwest of the shaft site of Geco

Mines Limited in the Manitouwadge area of the Thunder Bay District in northwestern Ontario. Claims are numbered TB-47462 to TB-47474 inclusive.

Access.—The property is connected by tractor road to Geco Mines Limited. The Geco Mines is now accessible by highway, and both C.N.R. and C.P.R. are currently building branch railroads to service the mining

A motor road, presently being built by Wilroy Mines Limited, will extend to within one mile of the Nama

Creek property.

Neighboring Properties.—Drilling on the Geco property has proven up 14,800,000 tons of ore grading 1.72% Cu, 3.55% zinc, and 1.73 ox. per ton of silver, and the mine is currently being prepared for production.

On the Wilroy property, which lies between the Geco and Nama Creek properties, three ore zones have been

indicated. The number 1 zone, located near the Geco boundary, is estimated to contain 796,000 tons of ore, averaging 1.50% Cu, 0.46% zinc, and 0.47 oz. silver per ton. The other two ore zones lie less than a mile from the Nama Creek boundary. One of them is reported to be as large as the number 1 zone, and higher in grade. The other zone is apparently complex in structure and its potential is not known as yet.

Geology.—The property is underlain by bands of mafic and felsic gneisses trending northwest and dipping northeast at approximately 45 degrees.

Crossing the northeast corner of the property is a band of granite, apparently the western extension of the

granite north of the Geco ore body.

Running through the property from the southeast and curving to the northwest is a broad band of mafic gneisses consisting of biotite, biotite-garnet-amphibole and amphibole gneisses. This band of gneisses is the host rock for the main mineralized zone on the property.

The southern portion of the property is underlain with iron formation interbanded with felsic gneisses. The sulphide mineralization on this part of the property is in the iron formation and associated gneisses.

To the west of the band of gneisses, in what appears to be a crossfault, is a diabase dike running north-south. Throughout the entire property there is considerable pegmatitic injection.

Exploration to Date.—An electromagnetic survey was carried out on the property with readings taken at 100:ft. intervals on lines 200 feet apart.

A total of eight important looking anomalies and several minor ones were disclosed.

A program of trenching was carried out to investigate the electromagnetic anomalies. A total of 11 trenches was dug across 9 anomalies. It was disclosed that all of the anomalies were due to sulphide mineralization.

The property was explored by a total of 40 diamond drill holes during the period April to November, 1954. Sixteen thousand feet of diamond drilling was completed in the investigation of six electromagnetic anomalies.

Mineralized Zones.—The main sulphide zone is believed to lie on the westward extension of the Gecoore-bearing structure.

The sulphides were encountered in a broad band of mafic gneisses which cross the property from southeast to northwest. Here sulphides of iron, copper, and zinc were found as replacements in biotite serecite gneisses

and pegmatite.

This zone was drilled for a lateral extent of 2,500 feet and a vertical depth of 700 feet. Widths of sulphides

varied between five and twenty feet in a zone dipping northeast at 45 degrees.

The best section of the main zone contains an estimated 321,095 tons of copper-zinc ore with an average grade of 1.05% copper, 3.44% zinc and 0.91 oz. silver per ton.

The rest of the main sulphide zone was found to be below ore grade.

Six other anomalies tested by drilling were found to contain sulphides, predominantly pyrrhotite with lesser variable amounts of pyrite. Low copper values were found in all the sulphide zones.

Conclusions.—The main zone has been delimited about the 700-ft. level. The tonnage and grade outlined so far are too low to permit economic mining of an ore body of this type. It is possible, however, that commercial ore might be present at greater depths.

The numerous sulphide zones in the south-central part of the property appear to offer the greatest promise. Although they do not make ore near surface, they indicate an extensive area of mineralization, associated with This mineralization appears to be on strike of the ore recently outlined on the Wilroy property. iron formation. Similar ore bodies might thus occur at depth on the Nama Creek property.

#### Bathurst Area—Province of New Brunswick

Nama Creek Mines Limited has recently acquired two properties in the Bathurst-Newcastle area of New

Brunswick.

A group of 30 claims, acquired from Ken-Bay Mines Limited, lies about 4 miles east of the American Metals property on which five major ore bodies have been found, and about 6 miles southwest of the Austin Brook ore body of Brunswick Mining and Smelting Corporation Limited. In February and March of 1955 an electromegnetic survey was carried out over the property, but no anomalous conditions were encountered. It is planned to await results of exploration now under way on neighboring properties before considering further work on this Nama Creek group. The other property in the Bathurst area is strategically located between the Austin Brook and Middle River ore bodies, both currently under development by Brunswick Mining and Smelting Corporation Limited. The property, consisting of 73 claims, was formerly under option to Conwest Exploration Limited. In 1953-54 Conwest carried out an electromagnetic survey on the property, followed by 13 diamond drill holes totalling 6,275 feet. The drill holes intersected shear zones and zones of graphitic schist, with variable amounts of pyrite and pyrrhotite mineralization. Results suggest that a fault zone, trending roughly east-west across the property, offsets the favorable horizon between the two Brunswick ore bodies. It is recommended that further investigations be carried out in the vicinity of the fault zone, with a gravity meter survey as the first step.

Respectfully submitted by

Toronto, Ontario, April 30th, 1955.

"J. T. FLANAGAN", M.A.Sc., P.Eng.

#### **CERTIFICATE**

I, John Terrence Flanagan, of the County of Lincoln, in the Province of Ontario, do hereby certify that:

1. I am a Mining Geologist and reside in the County of Lincoln, in the Province of Ontario.

2. I am a graduate of the University of Toronto, a Master of Applied Science in Mining, Geology and a member of the Association of Professional Engineers of Ontario, and I have been practising my profession since 1951.

3. I have no personal interests, either directly or indirectly, in the properties or securities of Nama Creek Mines Limited, and do not expect to receive any interest therein.

- 4. My joint report with J. McAdam, dated December 30, 1954, on the Manitouwadge area property of Nama Creek Mines Limited, is based on personal examination.
- 5. The said examination of the property was made by me at intervals during summer of 1954, during which time the said J. McAdams was resident engineer in charge of the property.

Dated at Toronto this 11th day of May 1955.

"J. T. FLANAGAN", M.A.Sc., P.Eng.

#### LETTER TO TORONTO STOCK EXCHANGE DATED MAY 5th, 1955

Dear Sirs:

The report of our Consulting Engineer, Mr. W. T. Horton, dated December 30th, 1954, to which is attached a report by Messrs. J. T. Flanagan, P.Eng., and J. McAdam, P.Eng., recommends that the main property of Nama Creek Mines Limited should be developed underground, and that levels should be established at the 500-ft. horizons.

The Directors of this company and myself, as President, now wish to advise you that these recommendations will be carried out.

Yours very truly,
NAMA CREEK MINES LIMITED
"M. J. BOYLEN," President.





